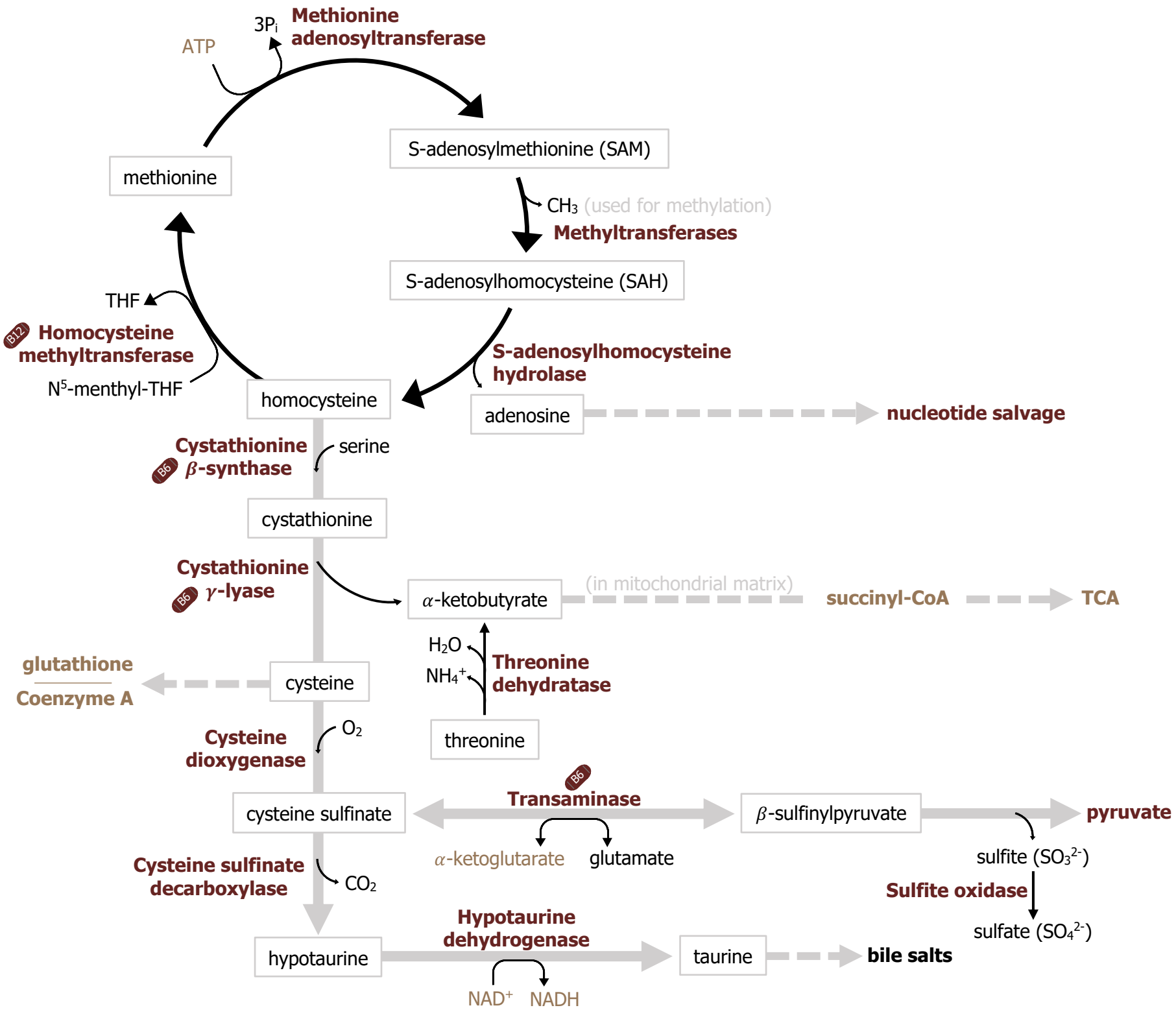
ATP
3Pi
Methionine adenosyltransferase
methionine
S-adenosylmethionine (SAM)
CH3 (used for methylation)
Methyltransferases
S-adenosylhomocysteine (SAH)
THF
B12
Homocysteine methyltransferase
N5-menthyl-THF
S-adenosylhomocysteine hydrolase
homocysteine
adenosine
nucleotide salvage
Cystathionine β-synthase
B6
serine
cystathionine
Cystathionine γ-lyase
B6
α-ketobutyrate
(in mitochondrial matrix)
succinyl-CoA
TCA
H2O
NH4+
Threonine dehydratase
threonine
glutathione
Coenzyme A
cysteine
O2
Cysteine dioxygenase
B6
Transaminase
cysteine sulfinate
β-sulfinylpyruvate
pyruvate
α-ketoglutarate
glutamate
sulfite (SO3 2-)
Sulfite oxidase
sulfate (SO4 2-)
Cysteine sulfinate decarboxylase
CO2
Hypotaurine dehydrogenase
hypotaurine
taurine
bile salts
NAD+
NADH